Aviation Investigation Final Report

Location:	ALICEVILLE, Alabama	**Accident Number:**	MIA00FA166
Date & Time:	May 23, 2000, 08:10 Local	**Registration:**	N711MS
Aircraft:	Beech 95-A55	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot complained of a headache before the flight departed and asked for an obtained Tylenol. The flight departed and while in contact with an air traffic control facility, he advised the controller, "...I'm having a little problem---not the airplane...." He asked for vectors to the nearest airport and was provided direction and distance then advised the controller, ""I can't move my---can't move my left arm...." Radio communications were lost. The airplane impacted trees then terrain located on private property in a nose and left wing low attitude. The nose section including the cockpit and both wings were fragmented; aircraft debris were found along the wreckage path. Examination of the engines/propellers, and flight controls revealed no evidence of preimpact failure or malfunction. The autopsy report indicates that the cause of death was multiple blunt trauma with a contributory cause as atherosclerotic cardiovascular disease. Review of the pilot's civilian and Air National Guard medical files revealed that he had elevated blood pressure, blood sugar, and weight during periodic physical examinations. The high blood pressure was not being treated according to the Air National Guard medical records.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The in-flight collision with trees then terrain while descending for undetermined reasons.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT

Findings
1. OBJECT - TREE(S)
2. (C) REASON FOR OCCURRENCE UNDETERMINED

Factual Information

HISTORY OF FLIGHT

On May 23, 2000, about 0810 central daylight time, a Beech 95-A55, N711MS, registered to a private individual, was lost from Meridian Radar Air Traffic Control Facility (RATCF) radar near Aliceville, Alabama. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 CFR Part 91 personal flight. The airplane was destroyed and the commercial-rated pilot, the sole occupant, was fatally injured. The flight originated about 0748 from the Key Field, Meridian, Mississippi.

Before departure, two individuals observed the pilot walking with a limp. He was also overheard while talking on a phone complaining with words to the effect that he had the worst headache ever. He asked a secretary at a fixed base operator if she had anything for a headache; he was offered two travel packs of tylenol but took only one. Statements from the individual who offered the tylenol packs and from the individuals who saw the pilot limping are an attachment to this report.

After takeoff, air traffic control communications were transferred to the Meridian Radar Air Traffic Control Facility (RATCF). The first contact with that facility occurred at 0750:10 when the pilot advised the controller that the flight was climbing to 5,500 feet. Radar contact was established; the pilot was advised to maintain visual flight rules (VFR) which he acknowledged. There were no communications with that facility after acknowledging to maintain VFR which occurred at 0750:37, and the next contact by the pilot at 0806:34, in which he broadcast part of the airplane registration. The controller advised the pilot to say again and he responded, "ahh one one nah mike sierra." The controller advised the pilot to go-ahead with his transmission and at 0806:55, the pilot stated, "yeah ahh I'm having a little problem---not the ahh airplane---probably need---(unintelligible)---vector to the ahh closest airfield to me now." The controller advised the pilot that the nearest airfield was located in Aliceville, which was located approximately 9 miles and 350 degrees from the airplane's present position. The pilot correctly repeated the heading and distance and the controller then asked the pilot if he was declaring an emergency. The pilot responded at 0807:26, "I can't move my ---can't move my left arm so I am having to fly---(unintelligible)." The controller gave the pilot wind and altimeter information and asked him if he needed anyone to meet him at the airport. His response was unintelligible; there were no further intelligible radio contacts by the pilot. The transcription of communications also indicates that the controller lost radar contact when the airplane was at 1,600 feet making an eastbound turn into Aliceville. The airplane crashed on private property; there were no know eyewitness to the accident.

PERSONNEL INFORMATION

The pilot was the holder of a commercial pilot certificate with ratings airplane single and multi-engine land, instrument airplane. He was issued a second class medical certificate on May 21, 2000, with the limitation "corrective lenses." He indicated on the medical application form for his last medical certificate that he was a pilot/commander for the 117th Air Refueling Wing, Alabama Air National Guard. He listed a total time on that application of 1,500 hours plus. He indicated on the form that he had not seen a health professional within the last 3 years. A copy of the medical application form is an attachment to this report. He listed his total time on Air Force Form 1446, dated January 22, 2000, as 4,905.0 hours.

AIRCRAFT INFORMATION

The airplane was signed off on January 20, 2000, as being inspected last in accordance with a 100-Hour inspection. No determination was made as to how much time the airplane had been operated at the time of the accident since the last inspection.

METEOROLOGICAL INFORMATION

A METAR weather observation taken at the Tuscaloosa Municipal Airport at 0753 local hours, indicates that the wind was from 190 degrees at 4 knots, 10 statute miles visibility, clear skies existed, the temperature and dew point were approximately 72 and 67 degrees Fahrenheit, respectively, and the altimeter setting was 29.89 inHg.

COMMUNICATIONS

The flight was in contact with the Meridian Radar Air Traffic Control Facility (RATCF) at the time radio communications were lost. A transcription of communications is an attachment to this report.

WRECKAGE AND IMPACT INFORMATION

The airplane crashed into a wooded area with shallow water on private property at 33 degrees 6.41 minutes North Latitude and 088 degrees 15.72 minutes West Longitude. That location when plotted was located approximately 024 degrees and 53 nautical miles from the departure airport.

Examination of the accident site revealed a wreckage path consisting of damaged trees and aircraft debris oriented on a magnetic heading of approximately 248 degrees; a strong fuel smell was noted along the wreckage path. A tree that was damaged approximately 50 feet above ground level (agl) was the first noted impact point. The damage to the tree indicates that the airplane was in a left bank of approximately 38 degrees (See photograph 1). The second impact point was a depression/crater in the water covered ground approximately 149 feet after the first tree damage; the descent angle was calculated to be approximately 19 degrees. The main wreckage which consisted of the fuselage aft of the rear spar carry-through structure and the empennage was located inverted approximately 182 feet from the

initial ground impact location. All components necessary to sustain flight were recovered along the wreckage path. Both engines were separated from the airplane and both propellers were separated from the engines as a result of the impact sequence. The left engine was located adjacent to the empennage; the crankshaft was fractured slightly forward of the crankcase. The right engine was located in a corn field approximately 182 feet from the empennage; approximately 120 degrees of the crankshaft flange was separated. Components that could be located were recovered for further examination. Personnel effects located in the wreckage were examined; no prescription medication was found.

Examination of the airplane revealed that the nose section including the cockpit and both wings were fragmented. Both horizontal stabilizers with attached elevators remained secured to the airframe; however, approximately the outboard six inches of the left stabilizer and the complete left elevator counterweight were impact separated. The vertical stabilizer with attached rudder also remained secured to the airframe; impact damage was noted to the leading edge of the vertical stabilizer. Examination of the fracture surfaces of the fragmented sections of both wings revealed no evidence of preimpact failure or malfunction. Rudder control cable continuity was confirmed from the cockpit to the control surface bellcrank; one bellcrank arm was fractured. Examination of the fracture surfaces of the aileron and elevator control cables revealed no evidence of preimpact failure or malfunction. Examination of the pilot's control wheel and approximate 11 inch segment of left control arm revealed impact signatures on the forward side of the right grip and on the aft side of the control arm correlating to a right bank angle input.

Examination of the left engine revealed that the crankshaft was fractured; the fracture location was aft of the crankshaft flange. No evidence of preimpact failure was noted on the fracture surface of the crankshaft. Rotation of the engine using a starter revealed crankshaft, camshaft, and gear train continuity. Weak compression and suction in the No. 5 cylinder was associated with debris beneath the exhaust valve. Examination of the engine driven fuel pump revealed that the drive coupling was not failed; the pump could not be rotated by hand. Impact damage was noted to the right magneto.

Examination of the left propeller revealed both blades were free to rotate in the hub. One of the blades was bent aft approximately 90 degrees; the bend was located approximately 22 inches inboard from the blade tip. The leading edge of the blade was twisted towards low pitch near the blade tip which was bent forward slightly. Gouges on the trailing edge of the blade were noted approximately 12 inches inboard from the blade tip. The other blade was bent aft approximately 5 degrees with the leading edge twisted towards low pitch. No gouges were noted on the blade. No evidence of preimpact failure or malfunction was noted.

Examination of the right engine revealed a section of the crankshaft flange was separated but found attached to the propeller hub; no evidence of preimpact failure was noted with the fracture surfaces of the crankshaft flange. The left magneto impact separated but was recovered. The engine was rotated using the starter motor and crankshaft, camshaft, and valve train continuity was confirmed; thumb compression was noted in each cylinder. No

preimpact failure or malfunction was noted to the engine driven fuel pump. The magnetos were rotated using an electric drill motor and found to produce spark at all towers.

Examination of the right propeller revealed both blades were free to rotate in the hub. One of the propeller blades was bent forward approximately 90 degrees approximately 8 inches from the blade tip. The other blade was bent aft approximately 45 degrees with the leading edge twisted towards low pitch. Gouges on the trailing edge of the blade were noted about 9 inches from the blade tip. No evidence of preimpact failure or malfunction was noted.

MEDICAL AND PATHOLOGICAL INFORMATION

Postmortem examination of the pilot was performed by Stephen Pustilnik, M.D., Deputy State Medical Examiner, Alabama Department of Forensic Sciences. The cause of death was listed as multiple blunt trauma. A contributory cause was listed as Atherosclerotic cardiovascular disease.

Toxicological analysis of specimens of the pilot was performed by the FAA Toxicology and Accident Research Laboratory (CAMI), Oklahoma City, Oklahoma. The results were negative for carbon monoxide, cyanide, and volatiles. The drug screen was positive for acetaminophen (12.917 ug/ml) which was detected in the blood.

Review of the pilot's medical records from the FAA Civil Aeromedical Institute Aeromedical Certification Division and the Alabama Air National Guard was performed by the NTSB Medical Officer who prepared a factual report which is an attachment to this report. The report indicates in part that the pilot had elevated blood pressure, blood sugar and weight which were found during the specified periodic physical examinations. The Air National Guard medical records indicates that the pilot was evaluated for in part elevated blood pressure though there was no note indicating treatment for high blood pressure.

ADDITIONAL INFORMATION

The airplane was released to Mr. Deanes Rowedder, an insurance adjuster for Kern and Wooley, on June 30, 2000. The retained aircraft maintenance records were also released to Mr. Deanes Rowedder, on February 5, 2001.

Pilot Information

Certificate:	Commercial	**Age:**	51,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	May 21, 2000
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	4905 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N711MS
Model/Series:	95-A55 95-A55	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	TC-346
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	January 20, 2000 100 hour	**Certified Max Gross Wt.:**	4880 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Continental
ELT:	Installed	**Engine Model/Series:**	IO-470L
Registered Owner:	JOSEPH G. & DEBORAH SANDERS	**Rated Power:**	260 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	TCL ,170 ft msl	**Distance from Accident Site:**	34 Nautical Miles
Observation Time:	07:53 Local	**Direction from Accident Site:**	74°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	190°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	72°C / 67°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MERIDIAN , MS (MEI)	**Type of Flight Plan Filed:**	None
Destination:	JASPER , AL (JFX)	**Type of Clearance:**	VFR
Departure Time:	07:48 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	33.120277,-88.149452(est)

Administrative Information

Investigator In Charge (IIC):	Monville, Timothy
Additional Participating Persons:	EDWARD M DASILVA; BIRMINGHAM , AL SCOTT BOYLE; ARVADA , CO STUART E BOTHWELL; WICHITA , KS DALE CARTER; MARIETTA , GA
Original Publish Date:	December 18, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
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